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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,541	01/04/2002	Andrew Brown	COMP:0229 P01-3580	7276

7590 07/13/2004

Intellectual Property Administration  
Legal Dept., M/S 35  
P.O. Box 272400  
Ft. Collins, CO 80527-2400

EXAMINER

TRIMMINGS, JOHN P

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/037,541		BROWN ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	John P Trimmings		2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 1,6,7,9,12,14,16,20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Claims 1-20 are presented for examination.

#### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: FIG.2 502 and 504. Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Specification***

2. The disclosure is objected to because of the following informalities:
- a. Page 27 lines 6 and 8 refer to a "TRST#" signal. The examiner requests that "TRST#" be changed to "TRST".
  - b. Page 31 line 11, and page 33 lines 3, 7 and 14 recite "JTAG master 406" but the examiner believes it should read "JTAG master 404".

- c. Page 31 line 9 recites "function" but the examiner believes it should read "functions".

Appropriate correction is required.

### ***Claim Objections***

3. Claims 1, 6, 7, 9, 12 and 14 are objected to because of the following informalities: the phrase "adapted to" is not a positive limitation of the scope of the claims. See MPEP 2106 II C. Appropriate correction is required.
4. Claim 16 is objected to because of the following informalities: where a claim sets forth steps of a method, each step should be separated by an indentation (see MPEP 608.01(a), paragraph 6.02 i). Appropriate correction is required.
5. Claim 20 is objected to because of the following informalities: the word "performed" is misspelled. Appropriate correction is required.
6. Claim 20 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. The claim does not change the scope of the parent claim.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 2, 3 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are further limiting the JTAG interface to comprise an ICE or ITP interface, but the references are not interfaces (see applicant's Abstract). ICE and ITP are more like protocols for certain types of integrated circuits. The examiner believes that the applicant wishes to limit the claims in a way that would accommodate these protocols within the invention, but has not clearly stated this in the claims.

8. Claims 7, 14 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims refer to an action to be taken "when the server is powered up". The claims are unclear as to this intent; is the action to be taken during initial powering-on of the server, or is the action taken when there is power applied to the server (in other words, not shut down)? These two choices are not the same, but the applicant's claim language may imply either. The applicant is unclear as to when the action takes place, and therefore the claims are indefinite.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 4-9, 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al., U.S. Patent No. 6598193, in view of Falik et al., U.S. Patent No. 6065078. As per Claims 1 and 9:

Li et al. teaches a managed server (column 2 line 13-14) and a management controller disposed in a managed server (FIG.1), comprising an embedded JTAG master having a JTAG interface (FIG.1 and FIG.2); and at least one integrated circuit disposed in the managed server (FIG.4 South Bridge 130 within 128) and connected for operative communication to the JTAG interface (via FIG.4 118), and wherein the JTAG master is adapted to be accessed remotely through the remote server management controller (FIG.4 106 or 120 or 110) to provide communication between a user and the at least one integrated circuit via the JTAG interface (example: FIG.4 126 to 122 to 102, then access TEST LOG 20 of FIG.1), and control of the JTAG interface is derived from the management controller (column 4 lines 8-20). Li et al. fails to specifically cite an IOP (IO Processor) operatively connected to the management controller, and a JTAG master interface. But one with ordinary skill in the art would know that the management controller of Li et al. would contain these two features, because the invention would not operate without them. And Li et al. has operatively combined the management controller with these two features (see FIG.1, 2 and 4). And, in an analogous art, Falik et al. does cite these features. An IOP (FIG.21 1844c) is connected to the JTAG Controller (FIG.21 1841, and column 3 lines 17-35), teaching the combination of an IOP with JTAG in testing an integrated circuit (FIG.21 1840). Falik et al., in column 1 lines 13-50 states an

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advantage of testing multiple ICs using only one debugger. One with ordinary skill in the art at the time of the invention, motivated by Falik et al., would combine the teachings of one controller in testing more than one IC with the invention of Li et al. in order to increase the testing capabilities of Li et al.

As per Claims 4 and 11:

Falik et al. further teaches the server management controller of claim 1 or 9 wherein the at least one integrated circuit comprises a microprocessor (FIG.21 1840).

And in view of the motivation previously stated, the claims are rejected.

As per Claims 5 and 13:

Li et al. further teaches the server management controller of claim 1 or 9, wherein the at least one integrated circuit comprises a component of a chipset (column 1 lines 5-8).

As per Claims 6, 12 and 19:

Li et al. further teaches the server management controller or method of claim 1, 9 or 16 wherein the JTAG master is adapted to program the at least one integrated circuit (column 5 lines 53-58).

As per Claims 7, 14 and 17:

Li et al. further teaches the server management controller or method of claim 1, 9 or 16 further comprising programming the IOP to control the JTAG master to perform a boundary scan of the integrated circuit when the managed server is powered up (column 5 lines 23-26 and column 1 lines 22-32).

As per Claims 8, 15 and 18:



Li et al. further teaches the server management controller or method of claim 1, 9 or 16 further comprising programming the IOP with descriptive data about the integrated circuit (column 6 lines 32-33).

As per Claims 16 and 20:

Li et al. teaches a method of communicating with an integrated circuit in a managed server (column 2 line 13-14), the managed server having a remote server management controller in operative communication therewith (FIG.1), the JTAG master having a JTAG interface connected for operative communication to the integrated circuit (FIG.2), the method comprising the acts of: receiving data at the IOP of the remote server management controller (column 6 lines 32-33); transmitting the data from the IOP to the JTAG master (column 2 lines 1-12); transmitting the data from the JTAG master to the integrated circuit via the JTAG interface (column 3 lines 48-56). Li et al. fails to specifically cite an IOP (IO Processor) operatively connected to the management controller, and a JTAG master interface. But one with ordinary skill in the art would know that the management controller of Li et al. would contain these two features, because the invention would not operate without them. And Li et al. has operatively combined the management controller with these two features (see FIG.1, 2 and 4). And, in an analogous art, Falik et al. does cite these features. An IOP (FIG.21 1844c) is connected to the JTAG Controller (FIG.21 1841, and column 3 lines 17-35), teaching the combination of an IOP with JTAG in testing an integrated circuit (FIG.21 1840). And in view of the motivation previously stated, the claim is rejected.

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10. Claims 2, 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al., U.S. Patent No. 6598193, in view of Falik et al., U.S. Patent No. 6065078, as applied to Claims 1 and 9 above, and further in view of Lee et al., U.S. Patent No. 6484274. Li et al. fails to teach the server management controller of claim 1 or 9 wherein the JTAG interface comprises an ICE or ITP interface. But in an analogous art, Lee et al. does teach the claimed protocols in the Abstract and column 2 lines 34-46. And in column 1 lines 25-67 and column 2 lines 1-46, the advantage is that the invention offers a way to view machine states in microprocessors that are ITP and ICE compatible. One with ordinary skill in the art at the time of the invention, motivated as suggested, would find it obvious to apply the teachings of Lee et al. to Li et al. and Falik et al., with the purpose of adding ICE/ITP capabilities.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P Trimmings whose telephone number is 703-305-0714. The examiner can normally be reached on Monday through Thursday, 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on 703-305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

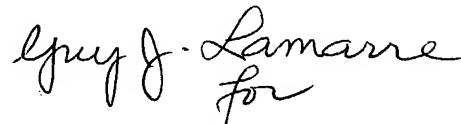
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John P Trimmings  
Examiner  
Art Unit 2133

jpt



Albert DeCady  
Primary Examiner